

W 091622959  
506

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

LUZZATTO, Kfir  
Luzzatto & Luzzatto  
P.O. Box 5352  
84152 Beer-Sheva  
ISRAËL

Date of mailing (day/month/year)
07 August 2000 (07.08.00)

Applicant's or agent's file reference
4588/WO/97

International application No.
PCT/IL99/00113

<b>IMPORTANT NOTIFICATION</b>
International filing date (day/month/year)
25 February 1999 (25.02.99)

1. The following indications appeared on record concerning:

the applicant     the inventor     the agent     the common representative

Name and Address  SECURITY-7 (SOFTWARE) LTD. P.O. Box 107 20692 Yoqneam Israel	State of Nationality IL	State of Residence IL
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

the person     the name     the address     the nationality     the residence

Name and Address  COMPUTER ASSOCIATES THINK, INC. One Computer Associates Plaza Islandia, NY 11749 United States of America	State of Nationality US	State of Residence US
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

3. Further observations, if necessary:

4. A copy of this notification has been sent to:	
<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No.: (41-22) 740.14.35	Authorized officer  R. Chrem  Telephone No.: (41-22) 338.83.38
---	--

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION  
(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
 United States Patent and Trademark  
 Office  
 Box PCT  
 Washington, D.C.20231  
 ÉTATS-UNIS D'AMÉRIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 20 September 1999 (20.09.99)	
International application No. PCT/IL99/00113	Applicant's or agent's file reference 4588/WO/97
International filing date (day/month/year) 25 February 1999 (25.02.99)	Priority date (day/month/year) 02 March 1998 (02.03.98)
Applicant ELGRESSY, Doron et al	

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:

22 August 1999 (22.08.99)

in a notice effecting later election filed with the International Bureau on:

\_\_\_\_\_

2. The election  was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Lazar Joseph Panakal
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

09 / 622959

From the INTERNATIONAL BUREAU

PCT

**NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES**

(PCT Rule 47.1(c), first sentence)

<b>Date of mailing (day/month/year)</b> 10 September 1999 (10.09.99)			
<b>Applicant's or agent's file reference</b> 4588/WO/97		<b>IMPORTANT NOTICE</b>	
<b>International application No.</b> PCT/IL99/00113	<b>International filing date (day/month/year)</b> 25 February 1999 (25.02.99)	<b>Priority date (day/month/year)</b> 02 March 1998 (02.03.98)	
<b>Applicant</b> SECURITY-7 (SOFTWARE) LTD. et al			

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
AU,CN,EP,IL,JP,KP,KR,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CU,CZ,DE,DK,EA,EE,ES,FI,GB,GD,GE,GH,GM,HR,HU,  
ID,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MD,MG,MK,MN,MW,MX,NO,NZ,OA,PL,PT,RO,RU,SD,  
SE,SG,SI,SK,SL,TJ,TR,TT,UA,UG,UZ,VN,YU,ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on 10 September 1999 (10.09.99) under No. WO 99/45454

**REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)**

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a **demand for international preliminary examination** must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

**REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))**

If the applicant wishes to proceed with the international application in the **national phase**, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

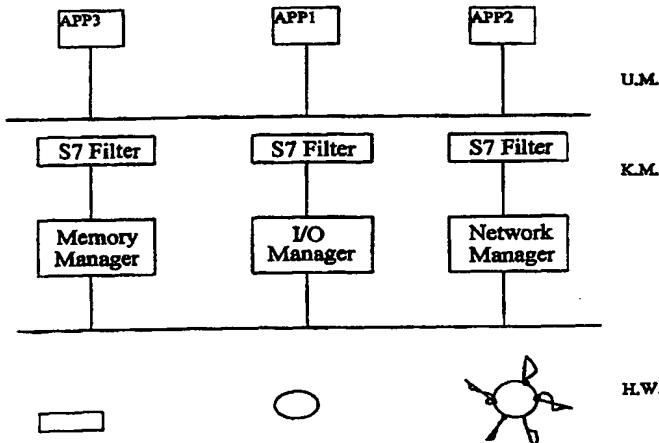
<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland	<b>Authorized officer</b> J. Zahra
Facsimile No. (41-22) 740.14.35	Telephone No. (41-22) 338.83.38



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> :	A1	(11) International Publication Number: WO 99/45454
G06F 1/00		(43) International Publication Date: 10 September 1999 (10.09.99)
<p>(21) International Application Number: PCT/IL99/00113</p> <p>(22) International Filing Date: 25 February 1999 (25.02.99)</p> <p>(30) Priority Data: 123512 2 March 1998 (02.03.98) IL</p> <p>(71) Applicant (for all designated States except US): SECURITY-7 (SOFTWARE) LTD. [IL/IL]; P.O. Box 107, 20692 Yoqneam (IL).</p> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (for US only): ELGRESSY, Doron [IL/IL]; 31 Kish Street, 33531 Haifa (IL). BEN ADERET, Fabian [IL/IL]; Hashikma Street 6/2, 10500 Migdal Haemek (IL).</p> <p>(74) Agents: LUZZATTO, Kfir et al.; Luzzatto &amp; Luzzatto, P.O. Box 5352, 84152 Beer-Sheva (IL).</p>		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
<p><b>Published</b></p> <p>With international search report.</p> <p>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</p>		

(54) Title: METHOD AND AGENT FOR THE PROTECTION AGAINST THE UNAUTHORISED USE OF COMPUTER RESOURCES



## (57) Abstract

Method and agent for preventing a hostile use of computer resources by an application running on a workstation. A list of services that are not allowed for access by unspecified applications is determined, and when such unspecified application runs on the workstation, direct access to the application is prevented from any resource. Any direct or indirect request for access to specific services is analyzed, to determine whether such request is allowable according to the list. The workstation processes the request if it is allowable. The unspecified application is prevented from accessing the requested resource if the request is not allowable. The resource may be any local or remote resource, such as, memory allocation, files, directories, operations with files and directories, such as copy, delete or compress, or any other operation leading to a permanent change in the workstation or its periphery. A look-up table which includes a list of services that are not allowed for access by unspecified applications, is used to determine whether requests made directly or indirectly by the unspecified application are allowable. The agent comprises a pre-set list of applications including a list of resources that each application may utilize.

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
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AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
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CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/IL 99/00113

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 6 G06F1/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 561 509 A (INT COMPUTERS LTD) 22 September 1993 see abstract; figure 2 see page 2, line 34 - page 3, line 13 see page 4, line 1 - line 21 see page 5, line 7 - line 18	1-4
A	---	5-8
X	GB 2 312 767 A (MITEL CORP) 5 November 1997 see the whole document ---	5-8
P, X	WO 98 21683 A (FINJAN SOFTWARE LTD) 22 May 1998 see the whole document -----	1-8

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

**Special categories of cited documents :**

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

24 June 1999

02/07/1999

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Powell, D

# INTERNATIONAL SEARCH REPORT

...formation on patent family members

International Application No

PCT/IL 99/00113

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
EP 0561509 A	22-09-1993	AU 3527293 A		23-09-1993
		DE 69324293 D		12-05-1999
		US 5347578 A		13-09-1994
		ZA 9301487 A		04-10-1993
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GB 2312767 A	05-11-1997	CA 2202118 A		29-10-1997
		DE 19717900 A		30-10-1997
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WO 9821683 A	22-05-1998	NONE		
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## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>4588/WO/97</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/IL 99/ 00113</b>	International filing date (day/month/year) <b>25/02/1999</b>	(Earliest) Priority Date (day/month/year) <b>02/03/1998</b>
Applicant <b>SECURITY-7 (SOFTWARE) LTD. et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :
  - contained in the international application in written form.
  - filed together with the international application in computer readable form.
  - furnished subsequently to this Authority in written form.
  - furnished subsequently to this Authority in computer readable form.
  - the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
  - the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2.  Certain claims were found unsearchable (See Box I).

3.  Unity of invention is lacking (see Box II).

## 4. With regard to the title,

- the text is approved as submitted by the applicant.
- the text has been established by this Authority to read as follows:

**METHOD AND AGENT FOR THE PROTECTION AGAINST THE UNAUTHORISED USE OF COMPUTER RESOURCES**

## 5. With regard to the abstract,

- the text is approved as submitted by the applicant.
- the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

## 6. The figure of the drawings to be published with the abstract is Figure No.

- as suggested by the applicant.
- because the applicant failed to suggest a figure.
- because this figure better characterizes the invention.

1

None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/IL 99/00113

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 6 G06F1/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 561 509 A (INT COMPUTERS LTD) 22 September 1993 see abstract; figure 2 see page 2, line 34 - page 3, line 13 see page 4, line 1 - line 21 see page 5, line 7 - line 18	1-4
A	---	5-8
X	GB 2 312 767 A (MITEL CORP) 5 November 1997 see the whole document	5-8
P, X	W0 98 21683 A (FINJAN SOFTWARE LTD) 22 May 1998 see the whole document	1-8
	-----	

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## ° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

24 June 1999

02/07/1999

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Powell, D

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IL 99/00113

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
EP 0561509	A 22-09-1993	AU 3527293 A		23-09-1993
		DE 69324293 D		12-05-1999
		US 5347578 A		13-09-1994
		ZA 9301487 A		04-10-1993
GB 2312767	A 05-11-1997	CA 2202118 A		29-10-1997
		DE 19717900 A		30-10-1997
WO 9821683	A 22-05-1998	NONE		

## PCT

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**  
**(PCT Article 36 and Rule 70)**

Applicant's or agent's file reference 4588/WO/97	<b>FOR FURTHER ACTION</b>		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/IL99/00113	International filing date (day/month/year) 25/02/1999	Priority date (day/month/year) 02/03/1998	
International Patent Classification (IPC) or national classification and IPC G06F1/00			
Applicant SECURITY-7 (SOFTWARE) LTD. et al.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I     Basis of the report
- II    Priority
- III    Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV    Lack of unity of invention
- V     Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI    Certain documents cited
- VII    Certain defects in the international application
- VIII    Certain observations on the international application

Date of submission of the demand 22/08/1999	Date of completion of this report <b>28.06.00</b>
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Bozas, I  Telephone No. +49 89 2399 7408



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/IL99/00113

**I. Basis of the report**

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

**Description, pages:**

1,2,4-9                   as originally filed  
3                          with telefax of                   01/05/2000

**Claims, No.:**

1-8                       as originally filed

**Drawings, sheets:**

1/3-3/3                   as originally filed

2. The amendments have resulted in the cancellation of:

the description,      pages:  
 the claims,           Nos.:  
 the drawings,         sheets:

3.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**see separate sheet**

4. Additional observations, if necessary:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/IL99/00113

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Yes:	Claims 3-8
	No:	Claims 1-2
Inventive step (IS)	Yes:	Claims
	No:	Claims 1-8
Industrial applicability (IA)	Yes:	Claims 1-8
	No:	Claims

**2. Citations and explanations****see separate sheet****VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IL99/00113

**Re Item I****Basis of the report**

1. The amendments filed with fax dated 07.06.2000 introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 34(2)(b) PCT. The amendments concerned are the following:

**Claim 1:**

Using the wording "used by certain applications downloaded from outside the workstation" instead of the wording "by unspecified applications" and after taking into account the definition of the term "unspecified applications" given in page 5, lines 15-16 of the description of the international application, it is considered that the new wording introduces subject-matter that extends the scope of the application as filed, the reasons being as follows:

The amendments cannot be directly and unambiguously deduced from the application documents as filed. The new wording limits the scope of amended claim 1 to certain applications downloaded from outside a workstation. However, in the application documents as filed no specific embodiment refers to downloadable applications or even gives a hint that said "unspecified applications" are downloadable applications (downloadable applications are mentioned in the application only when describing existing background art). On the contrary the definition of "unspecified applications" given in the description allows for any kind of application to be considered as an "unspecified application" as long as it has not been identified in a pre-set list of applications.

**Claims 5, 14 and 22:**

Amended independent claim 5 and newly filed independent claims 14 and 22 introduce also subject-matter which extends beyond the scope of the application as originally filed as they are also directed towards "applications downloaded from outside the workstation". The reasons for this opinion have been given in the paragraph above.

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**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/IL99/00113

Claims 2-4, 9-11, 6-8, 12-13, 15-21, 23-26:

Claims 2-4 and 9-11 are dependent from claim 1. Therefore, claims 2-4 and 9-11 are also not allowable. Correspondingly, claims 6-8 and 12-13, claims 15-21 and claims 23-26 are also not allowable, as they are dependent from claims 5, 14 and 22 respectively.

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1: EP-A-0 561 509

D2: GB-A-2 312 767

2. The present application does not meet the requirements of Articles 33(2) and (3) PCT, concerning novelty and inventive step. The reasons for this opinion are as follows:

**2.1 Lack of novelty, Article 33(2) PCT:**

**Claim 1:**

All features of independent claim 1 are known from D1 (references in parentheses refer to D1) which, using the wording of independent claim 1, discloses a method for preventing hostile use of computer resources by an application (abstract; page 1, lines 21-24) comprising the steps of: providing a list of services that are not allowed for access by unspecified applications (protected resources in D1, see abstract and page 3, lines 6-13), preventing unspecified applications from accessing any resource directly (page 1, lines 21-24; page 2, lines 54-58; page 3, lines 2-5), analysing any direct or indirect request for access to specific services, to determine whether such request is allowable according to said predefined list (in D1 umon is using a database to analyse and check a request, see page 3, lines 6-17; page 4, lines 6-21), allowing the workstation to process the request if it is allowable and refusing

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**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IL99/00113

processing if it is not allowable, wherein said resource can be any local or remote resource or any operation leading to a permanent change in the workstation or its periphery (page 3, lines 11-13; page 5, lines 7-15).

**2.2 Lack of inventive step, Article 33(3) PCT:**

**Claim 5:**

Independent claim 5 defines a software agent which implements the method described in independent claim 1. The use of software agents as a means for implementing security methods in computer systems is well known in the art (see e.g. D2, page 4, lines 3-9). Apart from this feature regarding the software agent, the technical subject-matter of independent claim 5 is directly equivalent to the technical subject matter of independent claim 1, which claim was shown to lack novelty here above. It would, therefore, be obvious to the person skilled in the art to combine the teaching of D1 with that of D2 and arrive at the apparatus described in claim 5. Therefore, the subject-matter of independent claim 5 does not involve an inventive step.

- 3. Concerning the subject-matter of the dependent claims of the international application, taken in combination with the claim(s) on which they respectively depend, it is not considered to meet the requirements of the PCT regarding both novelty and inventive step. In particular, the following is noted concerning the respective subject-matter of dependent claims 2-4 and 6-8:**

**Claim 2:**

The new feature introduced in dependent claim 2 is known from D1 (e.g. database tables used by the umon command, see page 3, lines 6-17).

**Claims 3-4:**

The new features introduced in dependent claims 3 and 4 refer to definitions of well known concepts on how to manage application and their associated resources (see e.g. abstract in D2). Adding these features therefore, does not involve an inventive step.

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**Claim 6-8:**

The new features introduced in dependent claims 6-8 either are already known from D1 (e.g. claim 6, see page 3, lines 6-17 in D1; claim 7, see page 3, lines 11-13; page 5, lines 7-15) or refer to well known concepts (claim 8) on how to manage applications and their associated resources (see e.g. abstract in D2). Adding these features therefore, does not involve an inventive step.

**Re Item VII****Certain defects in the international application**

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in documents D1 and D2 has not been mentioned in the description, nor have these documents been identified therein.
2. In order to comply with the requirements of Rule 6.3(b)(i) and (ii) PCT, the independent claims should have been properly cast in the two part form using the wording "characterized by", with those features forming part of the prior art being placed in the preamble.

## PATENT COOPERATION TREATY

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference 4588/WO/97	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/IL99/00113	International filing date (day/month/year) 25/02/1999	Priority date (day/month/year) 02/03/1998
International Patent Classification (IPC) or national classification and IPC G06F1/00		
<p>RECEIVED APR 3 - 2001 Group 2100</p> <p>Applicant [SECURITY-7 (SOFTWARE) LTD. et al.] Computer Associates Think, Inc</p>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 7 sheets.

3. This report contains indications relating to the following items:

- I     Basis of the report
- II     Priority
- III     Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV     Lack of unity of invention
- V     Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI     Certain documents cited
- VII     Certain defects in the international application
- VIII     Certain observations on the international application

Date of submission of the demand 22/08/1999	Date of completion of this report 28.06.00
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Bozas, I  Telephone No. +49 89 2399 7408



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/IL99/00113

**I. Basis of the report**

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

**Description, pages:**

1,2,4-9                   as originally filed  
3                          with telefax of                   01/05/2000

**Claims, No.:**

1-8                       as originally filed

**Drawings, sheets:**

1/3-3/3                   as originally filed

2. The amendments have resulted in the cancellation of:

the description,      pages:  
 the claims,           Nos.:  
 the drawings,        sheets:

3.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**see separate sheet**

4. Additional observations, if necessary:

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes:	Claims 3-8
	No:	Claims 1-2
Inventive step (IS)	Yes:	Claims
	No:	Claims 1-8
Industrial applicability (IA)	Yes:	Claims 1-8
	No:	Claims

**2. Citations and explanations**

**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

**see separate sheet**

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**Re Item I**

**Basis of the report**

1. The amendments filed with fax dated 07.06.2000 introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 34(2)(b) PCT. The amendments concerned are the following:

**Claim 1:**

Using the wording "used by certain applications downloaded from outside the workstation" instead of the wording "by unspecified applications" and after taking into account the definition of the term "unspecified applications" given in page 5, lines 15-16 of the description of the international application, it is considered that the new wording introduces subject-matter that extends the scope of the application as filed, the reasons being as follows:

The amendments cannot be directly and unambiguously deduced from the application documents as filed. The new wording limits the scope of amended claim 1 to certain applications downloaded from outside a workstation. However, in the application documents as filed no specific embodiment refers to downloadable applications or even gives a hint that said "unspecified applications" are downloadable applications (downloadable applications are mentioned in the application only when describing existing background art). On the contrary the definition of "unspecified applications" given in the description allows for any kind of application to be considered as an "unspecified application" as long as it has not been identified in a pre-set list of applications.

**Claims 5, 14 and 22:**

Amended independent claim 5 and newly filed independent claims 14 and 22 introduce also subject-matter which extends beyond the scope of the application as originally filed as they are also directed towards "applications downloaded from outside the workstation". The reasons for this opinion have been given in the paragraph above.

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Claims 2-4, 9-11, 6-8, 12-13, 15-21, 23-26:

Claims 2-4 and 9-11 are dependent from claim 1. Therefore, claims 2-4 and 9-11 are also not allowable. Correspondingly, claims 6-8 and 12-13, claims 15-21 and claims 23-26 are also not allowable, as they are dependent from claims 5, 14 and 22 respectively.

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1: EP-A-0 561 509

D2: GB-A-2 312 767

2. The present application does not meet the requirements of Articles 33(2) and (3) PCT, concerning novelty and inventive step. The reasons for this opinion are as follows:

2.1 Lack of novelty, Article 33(2) PCT:

Claim 1:

All features of independent claim 1 are known from D1 (references in parentheses refer to D1) which, using the wording of independent claim 1, discloses a method for preventing hostile use of computer resources by an application (abstract; page 1, lines 21-24) comprising the steps of: providing a list of services that are not allowed for access by unspecified applications (protected resources in D1, see abstract and page 3, lines 6-13), preventing unspecified applications from accessing any resource directly (page 1, lines 21-24; page 2, lines 54-58; page 3, lines 2-5), analysing any direct or indirect request for access to specific services, to determine whether such request is allowable according to said predefined list (in D1 upon using a database to analyse and check a request, see page 3, lines 6-17; page 4, lines 6-21), allowing the workstation to process the request if it is allowable and refusing

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processing if it is not allowable, wherein said resource can be any local or remote resource or any operation leading to a permanent change in the workstation or its periphery (page 3, lines 11-13; page 5, lines 7-15).

**2.2 Lack of inventive step, Article 33(3) PCT:**

**Claim 5:**

Independent claim 5 defines a software agent which implements the method described in independent claim 1. The use of software agents as a means for implementing security methods in computer systems is well known in the art (see e.g. D2, page 4, lines 3-9). Apart from this feature regarding the software agent, the technical subject-matter of independent claim 5 is directly equivalent to the technical subject matter of independent claim 1, which claim was shown to lack novelty here above. It would, therefore, be obvious to the person skilled in the art to combine the teaching of D1 with that of D2 and arrive at the apparatus described in claim 5. Therefore, the subject-matter of independent claim 5 does not involve an inventive step.

3. Concerning the subject-matter of the dependent claims of the international application, taken in combination with the claim(s) on which they respectively depend, it is not considered to meet the requirements of the PCT regarding both novelty and inventive step. In particular, the following is noted concerning the respective subject-matter of dependent claims 2-4 and 6-8:

**Claim 2:**

The new feature introduced in dependent claim 2 is known from D1 (e.g. database tables used by the umon command, see page 3, lines 6-17).

**Claims 3-4:**

The new features introduced in dependent claims 3 and 4 refer to definitions of well known concepts on how to manage application and their associated resources (see e.g. abstract in D2). Adding these features therefore, does not involve an inventive step.

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**Claim 6-8:**

The new features introduced in dependent claims 6-8 either are already known from D1 (e.g. claim 6, see page 3, lines 6-17 in D1; claim 7, see page 3, lines 11-13; page 5, lines 7-15) or refer to well known concepts (claim 8) on how to manage applications and their associated resources (see e.g. abstract in D2). Adding these features therefore, does not involve an inventive step.

**Re Item VII**

**Certain defects in the international application**

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in documents D1 and D2 has not been mentioned in the description, nor have these documents been identified therein.
  
2. In order to comply with the requirements of Rule 6.3(b)(i) and (ii) PCT, the independent claims should have been properly cast in the two part form using the wording "characterized by", with those features forming part of the prior art being placed in the preamble.

-05-2000

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-3-

perform hostile activities thereon.

The security problem was solved partially by the browser manufactures which allow the user to disable the use of executables. Of course this is not a reasonable solution, since all the electronic commerce and advertising are based on the use of executables.

In three copending patent applications of the same applicants hereof, WO 98/40993, WO 99/16225 AND WO 99/29082, the descriptions of which are incorporated herein by reference, there are described methods and means for preventing undesirable Executable Objects from infiltrating the LAN/WAN in which we work and, ultimately, our workstation and server. WO 99/29082 further provides a method for enforcing a security policy for selectively preventing the downloading and execution of undesired Executable Objects in an individual workstation.

While much has been done in the abovementioned patent applications toward protecting the individual workstation, one problem yet remained unsolved: the hostile use of local resources by applications which have passed any earlier security check (e.g., a gateway security policy), because they did not contravene such security policy, or by applications which have not passed through an earlier check point (such as a gateway equipped with a security policy check, as described in the aforementioned patent applications), either because such earlier point of check is not available, or because the application has been loaded directly on the workstation. Such hostile use of CPU resources may lead to damage to the data, operation and hardware of the workstation and, under the conditions-----

